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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------------------|------------------------|
| 10/656,197 | 09/08/2003 | Kazuki Hayashibara | 010482.52763US | 7485 |
| 23911 7590 10/22/2007 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300 | | | EXAMINER WENDMAGEGN, GIRUMSEW | |
| | | | ART UNIT 2621 | PAPER NUMBER |
| | | | MAIL DATE 10/22/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/656,197

Applicant(s)

HAYASHIBARA, KAZUKI

Examiner

Girumsew Wendmagegn

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/12/07; 5/2/07; 2/9/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 1 and 12 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sung et al (Patent No. US 5,594,660) and Sakamoto (patent No. US 6,157,770).

Regarding claim 1, Sung anticipates an optical disc apparatus using a decoder chip with no synchronization processing function of audio data and visual data comprising: an optical pickup device for reading video data from an optical disc (see column 3 line 55-64); a separator for separating visual data and audio data from the video data (see figure 2 element 210); a visual data decoder for decoding the separated visual data (see figure 2 element 211); an audio data decoder for decoding the separated audio data (see figure 2 element 212); a time information extractor independently for extracting time information of visual data from the visual data and for extracting time information of audio data from the audio data (see figure 2 element 210); a lip sync judge for comparing the time information of the visual data with the time

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information of the audio data at a predetermined interval, and judges whether reproduction of the audio data is synchronized with reproduction of the visual data or not(see figure4A) ;a lip sync compensator for compensating lip sync between the audio data and the visual data by pausing or fast-forwarding the reproduction of the audio data(see column6 line60-64) but does not teach lip sync compensating lip sync between the audio and video when an operation mode of the optical disc apparatus is switched from a fast-forwarding mode to a reproduction mode or from a pausing mode to the reproduction mode, or when the audio data are outputted at a level substantially equal to zero or less than a predetermined level at which a TV viewer can hear no sound. However Sakamoto teaches synchronizing audio video when an operation mode of the optical disc apparatus is switched from a fast-forwarding mode to a reproduction mode or from a pausing mode to the reproduction mode, or when the audio data are outputted at a level substantially equal to zero or less than a predetermined level at which a TV viewer can hear no sound (see column2 line 30-36).

One of ordinary skill in the art at the time the invention was made would have been motivated to synchronize audio video as in Sakamoto in Sung apparatus because it would make the transition from special reproduction to normal reproduction much smoother.

Regarding claim2, Sung teaches the optical disc apparatus in accordance with claim1, wherein the lip sync Compensator controls the audio data buffer so as to stop

output of the audio data in the predetermined period when the reproduction of the audio data goes ahead of the reproduction of the visual data (see column7 line 5-8).

Regarding claim3, Sung teaches the optical disc apparatus in accordance with claim2, wherein the predetermined period is equal to or shorter than a delay between the reproduction of the visual data and the reproduction of the audio data (see column10 line 54-57).

Regarding claim4, teaches anticipates the optical disc apparatus in accordance with claim 1, wherein the lip sync judger further judges whether leading of the audio data with respect to the visual data is equal to or smaller than a second predetermined period or not (see column11 line 8-13); and the lip sync compensator stops the compensation of the lip sync between the audio data and the visual data when the leading of the audio data with respect to the visual data is equal to or smaller than the second predetermined period (see column11 line 8-13).

Regarding claim5 Sung teaches the optical disc apparatus in accordance with claim1, wherein the first predetermined period is 100 ms (see column10 line 54-56 1frame take 33 ms and 3 takes 100ms).

Regarding claim6, Sung teaches the optical disc apparatus in accordance with claim 4, wherein the second predetermined period is 30 ms (see column11 line8-13 1frame takes 33 ms).

Regarding claim7, Sung teaches the optical disc apparatus in accordance with claim1, wherein a normal reproducing period with no lip sync compensation is about 30 ms and the lip sync compensator shortens the reproducing period of the predetermined picture included in the decoded visual data to be 20 ms (column8 line 15-21).

Regarding claim8, see the teaching of Sung and Sakamoto above. Either Sung or Sakamoto do not teach the audio data are decoded in compliance with MP3 standard. However it is old and well known in the art to decode audio data in compliance with MP3 standard. Therefore Official Notice is taken.

One of ordinary skill in the art at the time the invention was made would have been motivated to decode audio data in compliance with MP3 standard in to Sung system because it would take less space on recording medium.

Regarding claim9, Sung teaches the optical disc apparatus in accordance with claim1, wherein when the visual data goes ahead of the audio data, or when audio data goes ahead of the visual data but leading of the audio data with respect to the visual data is equal to or smaller than a second predetermined period, the lip sync

compensator does not compensate the lip sync between the audio data and the visual data (see column11 line8-13).

Regarding claim10, Sung teaches the optical disc apparatus in accordance with claim 9, wherein the predetermined standard period is a period in which occurrence of the lip-sync between the audio data and the visual data is rarely noticed by a TV viewer (see column11 line8-13).

Regarding claim11, Sung anticipates the optical disc apparatus in accordance with claim 10, wherein the second predetermined period is 30 ms (see column11 line8-13 1frame takes 33 ms).

Regarding claim12, Sung teaches an optical disc apparatus using a decoder chip with no synchronization processing function of audio data and visual data comprising: an optical pickup device for reading video data from on optical disc (see column3 line 55-64); a separator for separating visual data and audio data from the video data (see figure2 element 210); a visual data decoder for decoding the separated visual data (see figure2 element 211); an audio data decoder for decoding the separated audio data (see figure2 element 212); a time information extractor independently for extracting time information of visual data from the visual data and for extracting time information of audio data from the audio data(see figure2 element 210); a lip sync judger for comparing the time information of the visual data with the time

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information of the audio data at a predetermined interval, and judges whether reproduction of the audio data is synchronized with reproduction of the visual data or not (see figure 4A); and a lip sync compensator for compensating lip sync between the audio data and the visual data by pausing or fast-forwarding the reproduction of the audio data in a predetermined period during which no sound is outputted wherein when a delay between the reproduction of the visual data and the reproduction of the audio data is longer than the predetermined period (see column 6 line 60-64) but does not teach the lip sync compensator repeats the compensating of the lip sync between the audio data and the visual data more than once until the delay is equal to or smaller than a predetermined standard period. However it is old and well known in the art to repeat the process of compensating (synchronizing) audio and video until lip sync effect is not noticeable. Therefore Official notice is taken.

One of ordinary skill in the art at the time the invention was made would have been motivated to synchronize audio and video repeatedly in Sung apparatus because it would decrease lip sync effect.

Regarding claim 13, Sung teaches the optical disc apparatus in accordance with claim 12, wherein the lip sync judger further judges whether the delay of the visual data with respect to the audio data is equal to or smaller than a second predetermined standard period or not (see column 10 line 8-11); and the lip sync compensator completes the compensation of the lip sync between the audio data and the visual data

when the delay of the visual data with respect to the audio data is equal to or smaller than the second predetermined standard period (see column10 line 8-13).

Regarding claim14, Sung teaches the first predetermined standard period is a period in which occurrence of the lip sync between the audio data and the visual data is obviously noticed by a TV viewer (see column10 line 54-56 3 frame is noticeable); and the second predetermined standard period is a period in which occurrence of the lip sync between the audio data and the visual data is rarely noticed by the TV viewer (see column11 line8-13).

Regarding claim15, Sung teaches the optical disc apparatus in accordance with claim 14, wherein the first predetermined standard period is 100 ms and the predetermined standard period is 30 ms (see column10 line54-56 and column11 line8-13).

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Girumsew Wendmagegn whose telephone number is 571-270-1118. The examiner can normally be reached on 7:30-5:00, M-F, alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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